

Chapter 173-460 WAC
CONTROLS FOR NEW SOURCES OF TOXIC AIR
POLLUTANTS

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WAC

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DISPOSITION OF SECTIONS FORMERLY
CODIFIED IN THIS CHAPTER

173-460-110	Acceptable source impact levels. [Statutory Authority: Chapter 70.94 RCW. 94-03-072 (Order 93-19), § 173-460-110, filed 1/14/94, effective 2/14/94. Statutory Authority: RCW 70.94.331. 91-13-079 (Order 90-62), § 173-460-110, filed 6/18/91, effective 9/18/91.] Repealed by 09-11-131 (Order 05-19), filed 5/20/09, effective 6/20/09. Statutory Authority: Washington Clean Air Act, RCW 70.94.152.
173-460-120	Scientific review and amendment of acceptable source impact levels and lists. [Statutory Authority: RCW 70.94.331. 91-13-079 (Order 90-62), § 173-460-120, filed 6/18/91, effective 9/18/91.] Repealed by 09-11-131 (Order 05-19), filed 5/20/09, effective 6/20/09. Statutory Authority: Washington Clean Air Act, RCW 70.94.152.
173-460-130	Fees. [Statutory Authority: RCW 70.94.331. 91-13-079 (Order 90-62), § 173-460-130, filed 6/18/91, effective 9/18/91.] Repealed by 09-11-131 (Order 05-19), filed 5/20/09, effective 6/20/09. Statutory Authority: Washington Clean Air Act, RCW 70.94.152.
173-460-160	Class B toxic air pollutants and acceptable source impact levels. [Statutory Authority: Chapter 70.94 RCW. 94-03-072 (Order 93-19), § 173-460-160, filed 1/14/94, effective 2/14/94. Statutory Authority: RCW 70.94.331. 91-13-079 (Order 90-62), § 173-460-160, filed 6/18/91, effective 9/18/91.] Repealed by 09-11-131 (Order 05-19), filed 5/20/09, effective 6/20/09. Statutory Authority: Washington Clean Air Act, RCW 70.94.152.

WAC 173-460-010 Purpose. (1) Pursuant to chapter 70.94 RCW, Washington Clean Air Act, the purpose of this chapter is to establish the systematic control of new or modified sources emitting toxic air pollutants (TAPs) in order to prevent air pollution, reduce emissions to the extent reasonably possible, and maintain such levels of air quality as will protect human health and safety. Toxic air pollutants include carcinogens and noncarcinogens listed in WAC 173-460-150.

(2) This chapter establishes three major requirements:

(a) Best available control technology for toxics;

(b) Toxic air pollutant emission quantification;

(c) Human health and safety protection demonstration.

(3) Policy. It is the policy of ecology to reduce, avoid, or eliminate toxic air pollutants prior to their generation whenever economically and technically practicable.

[Statutory Authority: Washington Clean Air Act, RCW

70.94.152. 09-11-131 (Order 05-19), § 173-460-010, filed 5/20/09, effective 6/20/09. Statutory Authority: RCW 70.94.331. 91-13-079 (Order 90-62), § 173-460-010, filed 6/18/91, effective 9/18/91.]

WAC 173-460-020 Definitions. The definitions of terms contained in chapter 173-400 WAC are incorporated into this chapter by reference. Terms specific to this chapter are defined as follows:

(1) "Acceptable source impact analysis" means a procedure for demonstrating compliance with WAC 173-460-070, that compares maximum incremental ambient air impacts with applicable acceptable source impact levels (ASIL).

(2) "Acceptable source impact level (ASIL)" means a screening concentration of a toxic air pollutant in the ambient air. The ASIL for each toxic air pollutant is listed in WAC 173-460-150.

(3) "Best available control technology for toxics (tBACT)" means best available control technology, as that term is defined in WAC 173-400-030, as applied to toxic air pollutants.

(4) "De minimis emissions" means trivial levels of emissions that do not pose a threat to human health or the environment. The de minimis emission threshold values are listed in WAC 173-460-150.

(5) "Increased cancer risk of one in one hundred thousand" means the 95th percent upper bound on the estimated risk of one additional cancer above the background cancer rate per one hundred thousand individuals continuously exposed to a carcinogenic toxic air pollutant at a given average dose for a specified time.

(6) "New or modified toxic air pollutant source" means the construction or modification of a stationary source that increases the amount of any toxic air pollutant emitted by such source or that results in the emission of any toxic air pollutant not previously emitted.

(7) "Small quantity emission rate (SQER)" means a level of emissions below which dispersion modeling is not required to demonstrate compliance with acceptable source impact levels. SQERs are listed in WAC 173-460-150.

(8) "Toxic air pollutant (TAP)" means any toxic air pollutant listed in WAC 173-460-150.

[Statutory Authority: Washington Clean Air Act, RCW 70.94.152. 09-11-131 (Order 05-19), § 173-460-020, filed 5/20/09, effective 6/20/09. Statutory Authority: Chapter 70.94 RCW. 94-03-072 (Order 93-19), § 173-460-020, filed 1/14/94, effective 2/14/94. Statutory Authority: RCW 70.94.331. 91-13-079 (Order 90-62), § 173-460-020, filed 6/18/91, effective 9/18/91.]

WAC 173-460-030 Applicability. The provisions of this chapter apply statewide. WAC 173-460-090 and 173-460-100 must be implemented solely by ecology.

[Statutory Authority: Washington Clean Air Act, RCW 70.94.152. 09-11-131 (Order 05-19), § 173-460-030, filed 5/20/09, effective 6/20/09. Statutory Authority: Chapter 70.94 RCW. 94-03-072 (Order 93-19), § 173-460-030, filed 1/14/94, effective 2/14/94. Statutory Authority: RCW 70.94.331. 91-13-079 (Order 90-62), § 173-460-030, filed 6/18/91, effective 9/18/91.]

WAC 173-460-040 New source review. (1) Applicability and exemptions. This chapter supplements the new source review requirements of WAC 173-400-110 by adding review requirements for new and modified toxic air pollutant sources. An action that is exempt from new source review under WAC 173-400-110 (4) or (5) is exempt under this chapter as well, except that a local air authority may adopt its own list of exemptions in accordance with RCW 70.94.331 (2)(b) to operate in lieu of or in addition to the exemptions in WAC 173-400-110 (4) and (5). An action that requires a notice of construction application under WAC 173-400-110 is subject to the review requirements of this chapter, unless the emissions before control equipment of each toxic air pollutant from a new source or the increase in emissions from each modification is less than the applicable de minimis emission threshold for that TAP listed in WAC 173-460-150.

(2) New source review of a modification is limited to the emission unit or units proposed to be modified and the TAPs whose emissions would increase as a result of the modification.

(3) The permitting authority that is reviewing a notice of construction application for a new or modified toxic air pollutant source must ensure that:

(a) The new or modified emission units use tBACT for emissions control for the toxic air pollutants with emission increases that trigger the need to submit a notice of construction application; and

(b) The new or modified emission units comply with WAC 173-460-070 as demonstrated by using the procedures established in WAC 173-460-080 or, failing that, demonstrates compliance by using the additional procedures in WAC 173-460-090 and/or 173-460-100.

[Statutory Authority: Washington Clean Air Act, RCW 70.94.152. 09-11-131 (Order 05-19), § 173-460-040, filed 5/20/09, effective 6/20/09. Statutory Authority: Chapter

70.94 RCW. 94-03-072 (Order 93-19), § 173-460-040, filed 1/14/94, effective 2/14/94. Statutory Authority: RCW 70.94.331. 91-13-079 (Order 90-62), § 173-460-040, filed 6/18/91, effective 9/18/91.]

WAC 173-460-050 Requirement to quantify emissions. (1)
New sources.

A notice of construction application for a new or modified toxic air pollutant source must quantify the increase in the emissions of each TAP, after application of tBACT, emitted by the new or modified emission units.

(2) Small quantity emission rates.

A notice of construction application that relies on SQERs rather than dispersion modeling to demonstrate compliance with WAC 173-460-070 must quantify the increase in emissions of each TAP emitted by the new or modified emission units after application of tBACT. The quantification must contain sufficient detail to demonstrate to the satisfaction of the permitting authority that the increase in emissions is less than the applicable small quantity emission rates listed in WAC 173-460-150.

(3) Level of detail.

An acceptable source impact level analysis under WAC 173-460-080 may be based on a conservative estimate of emissions that represents good engineering judgment. If compliance with WAC 173-460-070 and 173-460-080 cannot be demonstrated, more precise emission estimates may be used to demonstrate compliance with WAC 173-460-090.

[Statutory Authority: Washington Clean Air Act, RCW 70.94.152. 09-11-131 (Order 05-19), § 173-460-050, filed 5/20/09, effective 6/20/09. Statutory Authority: Chapter 70.94 RCW. 94-03-072 (Order 93-19), § 173-460-050, filed 1/14/94, effective 2/14/94. Statutory Authority: RCW 70.94.331. 91-13-079 (Order 90-62), § 173-460-050, filed 6/18/91, effective 9/18/91.]

WAC 173-460-060 Control technology requirements. (1)
Except as provided for in WAC 173-460-040, a person shall not establish, operate, or cause to be established or operated any new or modified toxic air pollutant source which is likely to increase TAP emissions without installing and operating tBACT.

(2) A notice of construction application for a new or modified toxic air pollutant source must demonstrate that the new or modified emission units will employ tBACT for all TAPs for which the increase in emissions will exceed de minimis emission values as found in WAC 173-460-150. TAP emission increases from nonprocess fugitive emissions activities such as construction or demolition sites, unpaved and paved roads,

coal piles, waste piles and fuel and ash handling operations are exempt from the requirement to apply tBACT.

[Statutory Authority: Washington Clean Air Act, RCW 70.94.152. 09-11-131 (Order 05-19), § 173-460-060, filed 5/20/09, effective 6/20/09. Statutory Authority: RCW 70.94.860, 70.94.510 and 70.94.331. 98-15-129 (Order 98-04), § 173-460-060, filed 7/21/98, effective 8/21/98. Statutory Authority: Chapter 70.98 RCW. 98-04-062 (Order 97-38), § 173-460-060, filed 2/2/98, effective 3/5/98. Statutory Authority: Chapter 70.94 RCW. 94-03-072 (Order 93-19), § 173-460-060, filed 1/14/94, effective 2/14/94. Statutory Authority: RCW 70.94.331. 91-13-079 (Order 90-62), § 173-460-060, filed 6/18/91, effective 9/18/91.]

WAC 173-460-070 Ambient impact requirement. A notice of construction application must demonstrate that the increase in emissions of toxic air pollutants from the new or modified emission units at the source are sufficiently low to protect human health and safety from potential carcinogenic and/or other toxic effects. Compliance must be demonstrated in any area to which the applicant does not restrict or control access. The application must demonstrate compliance by using procedures established in this chapter after complying with the control technology requirements in WAC 173-460-060.

[Statutory Authority: Washington Clean Air Act, RCW 70.94.152. 09-11-131 (Order 05-19), § 173-460-070, filed 5/20/09, effective 6/20/09. Statutory Authority: RCW 70.94.331. 91-13-079 (Order 90-62), § 173-460-070, filed 6/18/91, effective 9/18/91.]

WAC 173-460-071 Voluntary limits on emissions. (1) If requested by an applicant, the permitting authority may issue a regulatory order that limits emissions of a particular TAP to a level that is lower than the potential emissions of that particular TAP otherwise allowed under all applicable requirements of chapter 70.94 RCW and the federal Clean Air Act.

(2) Any order issued under this section is subject to the notice and comment procedures in WAC 173-400-171 or the permitting authority's public notice and commenting procedures.

(3) Any order issued under this section must include monitoring, recordkeeping, and reporting requirements sufficient to ensure that the applicant complies with any conditions established under this section. Monitoring requirements must use terms, test methods, units, averaging periods, and other statistical conventions consistent with the

requirements of WAC 173-400-105.

[Statutory Authority: Washington Clean Air Act, RCW 70.94.152. 09-11-131 (Order 05-19), § 173-460-071, filed 5/20/09, effective 6/20/09.]

WAC 173-460-080 First tier review. (1) A notice of construction application for a new or modified toxic air pollutant source must include an acceptable source impact level analysis for each TAP emitted by the new or modified emission units with an emission increase greater than the de minimis emission level specified in WAC 173-460-150. The permitting authority may complete this analysis.

(2) The acceptable source impact analysis requirement of WAC 173-460-070 can be satisfied for any TAP using either dispersion modeling or the small quantity emission rate.

(a) Dispersion modeling. The applicant who relies on dispersion modeling must model the increase in the emissions of each TAP emitted by the new or modified emission units, after application of tBACT. The notice of construction application must demonstrate that the modeled ambient impact of the aggregate emissions increase of each TAP does not exceed the ASIL for that TAP as listed in WAC 173-460-150. If concentrations predicted by dispersion screening models exceed applicable acceptable source impact levels, more refined modeling and/or emission techniques must be used. Refined modeling techniques must be approved by the permitting authority.

(b) Small quantity emission rates. An applicant may show for any TAP that the increase in emissions of that TAP, after application of tBACT, is less than the small quantity emission rate listed for that TAP in WAC 173-460-150.

(3) Reduction of TAPs from existing emission units. An applicant may include in a acceptable source impact analysis proposed reductions in actual emissions of a particular TAP from emission units at the source that are not new or modified for the purpose of offsetting emissions of that TAP caused by the new or modified source. The reductions in TAP emissions authorized by this subsection must be included in the approval order as enforceable emission limits and must meet all the requirements of WAC 173-460-071.

(4) Decision criteria.

(a) If the permitting authority finds that the modeled impact of the increase in emissions of a TAP from the new or modified emission units does not exceed the ASIL for that TAP then the authority may approve the notice of construction application.

(b) If the permitting authority finds that the modeled impact of the increase in emissions of a TAP from the new or modified emission units exceeds the ASIL for that TAP then the

permitting authority may not approve the project. The applicant may file a second tier review application in compliance with WAC 173-460-090.

[Statutory Authority: Washington Clean Air Act, RCW 70.94.152. 09-11-131 (Order 05-19), § 173-460-080, filed 5/20/09, effective 6/20/09. Statutory Authority: Chapter 70.94 RCW. 94-03-072 (Order 93-19), § 173-460-080, filed 1/14/94, effective 2/14/94. Statutory Authority: RCW 70.94.331. 91-13-079 (Order 90-62), § 173-460-080, filed 6/18/91, effective 9/18/91.]

WAC 173-460-090 Second tier review. (1) Applicability.

An applicant who cannot demonstrate compliance with WAC 173-460-070 using an acceptable source impact level analysis as provided in WAC 173-460-080, may submit a petition requesting that ecology perform a second tier review to determine a means of compliance with WAC 173-460-070. Petitions for second tier review must be submitted to ecology with a copy to the permitting authority with jurisdiction.

(2) Second tier petition submittal requirements. Ecology will evaluate a second tier petition only if:

(a) The permitting authority submits to ecology a preliminary order of approval that addresses all applicable new source review issues with the exception of the outcome of the second tier review, State Environmental Policy Act review, public notification, and prevention of significant deterioration review; and

(b) The emission controls contained in the preliminary order of approval represent at least tBACT; and

(c) The applicant has developed a health impact assessment protocol that has been approved by ecology;

(d) The ambient impact of the emissions increase of each TAP that exceeds acceptable source impact levels has been quantified using refined air dispersion modeling techniques as approved in the health impact assessment protocol; and

(e) The petition contains a health impact assessment conducted in accordance with the approved health impact assessment protocol.

Note: Contact ecology's air quality program for a copy of a guidance document to assist in the preparation of the health impact assessment protocol.

(3) Health impact assessment (HIA) protocol. The HIA presents data about the new or modified source and its built and natural environment. A HIA includes but is not limited to: Site description, TAP concentrations and toxicity, identification of exposed populations and an exposure assessment. The HIA protocol must be reviewed and approved by ecology prior to development of the HIA.

(4) The health impact assessment must utilize current

scientific information. New scientific information on the toxicological characteristics of toxic air pollutants may be used by ecology to justify modifications of risk-based concentrations.

(5) Background concentrations of TAPs will be considered as part of a second tier review. Background concentrations can be estimated using:

(a) The latest National Ambient Toxics Assessment data for the appropriate census tracts; or

(b) Ambient monitoring data for the project's location; or

(c) Modeling of emissions of the TAPs subject to second tier review from all stationary sources within 1.5 kilometers of the source location.

(6) Reduction of TAPs from existing emission units. For the purpose of offsetting emissions of a particular TAP, an applicant may propose reductions in actual emissions of that TAP from existing, unmodified emission units at the source or existing, unmodified emission units at other nearby sources. The health impact analysis must evaluate the benefits of the emission reductions. The reductions in TAP emissions authorized by this subsection must be included in an approval order as enforceable emission limits and must meet all requirements of WAC 173-460-071.

(7) Approval criteria for second tier review. Ecology may recommend approval of a project that is likely to cause an exceedance of acceptable source impact levels for one or more TAPs only if it determines that the emission controls for the new and modified emission units represent tBACT and the applicant demonstrates that the increase in emissions of TAPs is not likely to result in an increased cancer risk of more than one in one hundred thousand and ecology determines that the noncancer hazard is found to be acceptable.

(8) Application processing. Within thirty days after receiving a second tier petition ecology must either notify the applicant in writing that the application is complete or notify the applicant in writing of all additional information required to make it complete.

(9) Public involvement. All notice of construction approval orders with a second tier component are subject to the public notice and comment requirements of WAC 173-400-171, which may be integrated with the permitting authority's public notice and comment procedures.

(10) Recommendation. Within sixty days of determining that a petition is complete ecology must make a recommendation to the permitting authority.

(a) If ecology recommends approval of the second tier petition, the permitting authority may approve the notice of construction application. Any new emission limits or conditions specified by ecology must be incorporated into the approval order.

(b) If ecology recommends denial of the second tier petition, then the permitting authority may not approve the project.

[Statutory Authority: Washington Clean Air Act, RCW 70.94.152. 09-11-131 (Order 05-19), § 173-460-090, filed 5/20/09, effective 6/20/09. Statutory Authority: Chapter 70.94 RCW. 94-03-072 (Order 93-19), § 173-460-090, filed 1/14/94, effective 2/14/94. Statutory Authority: RCW 70.94.331. 91-13-079 (Order 90-62), § 173-460-090, filed 6/18/91, effective 9/18/91.]

WAC 173-460-100 Third tier review. (1) Applicability. An applicant for a project that exceeds the second tier review thresholds may submit a third tier petition requesting that the director of ecology approve the project based on a risk management analysis.

(2) Contents of the petition.

The petition must meet the submittal requirements of WAC 173-460-090. The applicant may submit the request for a risk management decision concurrently with the second tier petition. Prior denial of a second tier petition submitted under WAC 173-460-090 is not required.

(3) Criteria for approval. Ecology's director must find that the following conditions are met before approving a third tier petition:

(a) Proposed emission controls represent at least tBACT; and

(b) A HIA has been completed as described in WAC 173-460-090(3); and

(c) Approval of the project will result in a greater environmental benefit to the state of Washington.

(4) Additional methods to reduce toxic air pollutants. In addition to the requirements in subsection (3) of this section, the applicant may propose and ecology may consider measures that would reduce community exposure, especially exposure of that portion of the community subject to the greatest additional risk, to comparable toxic air pollutants provided that such measures are not already required.

(5) Application processing. Within thirty days of receiving a third tier petition ecology must determine if the petition includes the information required in WAC 173-460-090. If the petition is deemed complete, ecology must begin substantive review. If the petition is deemed incomplete, ecology must give written notification to the applicant of the information that is required to make the petition complete.

(6) Public involvement. Ecology will initiate public notice and comment within sixty days of determining that a third tier petition is complete. In addition to the public notice and comment requirements of WAC 173-400-171, the

applicant must hold a public hearing to:

(a) Present the results of the health impact analysis, the proposed emission controls, pollution prevention methods, additional proposed measures, and remaining risks; and

(b) Participate in discussions and answer questions.

(7) Recommendation.

(a) If ecology recommends approval of the third tier petition, the permitting authority may approve the notice of construction application. Any new emission limits or conditions specified by ecology must be incorporated into the approval order.

(b) If ecology recommends denial of the third tier petition then the permitting authority may not approve the project.

[Statutory Authority: Washington Clean Air Act, RCW 70.94.152. 09-11-131 (Order 05-19), § 173-460-100, filed 5/20/09, effective 6/20/09. Statutory Authority: Chapter 70.94 RCW. 94-03-072 (Order 93-19), § 173-460-100, filed 1/14/94, effective 2/14/94. Statutory Authority: RCW 70.94.331. 91-13-079 (Order 90-62), § 173-460-100, filed 6/18/91, effective 9/18/91.]

WAC 173-460-140 Remedies. Violations of this chapter are subject to the penalty provisions and/or other remedies provided in chapter 70.94 RCW.

[Statutory Authority: RCW 70.94.331. 91-13-079 (Order 90-62), § 173-460-140, filed 6/18/91, effective 9/18/91.]

WAC 173-460-150 Table of ASIL, SQER and de minimis emission values.

The following table lists the common name of toxic air pollutants, the chemical abstract service (CAS) number; the averaging period; the acceptable source impact level (ASIL); the small quantity emission rate (SQER); and de minimis emission values.

Common Name	CAS #	Averaging Period	ASIL ($\mu\text{g}/\text{m}^3$)	SQER (lb/averaging period)	De Minimis (lb/averaging period)
1,1,1,2-Tetrachloroethane	630-20-6	year	0.135	25.9	1.3
1,1,1,2-Tetrafluoroethane	811-97-2	24-hr	8.00E+04	10500	526
1,1,1-Trichloroethane	71-55-6	24-hr	1000	131	6.57
1,1,2,2-Tetrachloroethane	79-34-5	year	0.0172	3.3	0.165
1,1,2-Trichloroethane	79-00-5	year	0.0625	12	0.6
1,1-Dichloroethane	75-34-3	year	0.625	120	6
1,1-Dichloroethylene	75-35-4	24-hr	200	26.3	1.31
1,1-Difluoroethane	75-37-6	24-hr	4.00E+04	5260	263

Common Name	CAS #	Averaging Period	ASIL ($\mu\text{g}/\text{m}^3$)	SQER (lb/averaging period)	De Minimis (lb/averaging period)
1,1-Dimethylhydrazine	57-14-7	24-hr	0.5	0.0657	0.00329
1,2,3,4,6,7,8,9-Octachlorodibenzofuran	39001-02-0	year	0.000263	0.0505	0.00252
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-Dioxin	3268-87-9	year	0.000263	0.0505	0.00252
1,2,3,4,6,7,8-Heptachlorodibenzofuran	67562-39-4	year	2.63E-06	0.000505	2.52E-05
1,2,3,4,7,8,9-Heptachlorodibenzofuran	55673-89-7	year	2.63E-06	0.000505	2.52E-05
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	35822-46-9	year	2.63E-06	0.000505	2.52E-05
1,2,3,4,7,8-Hexachlorodibenzofuran	70648-26-9	year	2.63E-07	5.05E-05	2.52E-06
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	39227-28-6	year	2.63E-07	5.05E-05	2.52E-06
1,2,3,6,7,8 Hexachlorodibenzo-p-dioxin	57653-85-7	year	2.63E-07	5.05E-05	2.52E-06
1,2,3,6,7,8-Hexachlorodibenzofuran	57117-44-9	year	2.63E-07	5.05E-05	2.52E-06
1,2,3,7,8,9-Hexachlorodibenzofuran	72918-21-9	year	2.63E-07	5.05E-05	2.52E-06
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	19408-74-3	year	2.63E-07	5.05E-05	2.52E-06
1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	year	5.26E-07	0.000101	5.05E-06
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	40321-76-4	year	2.63E-08	5.05E-06	2.52E-07
1,2,3-Trichloropropane	96-18-4	24-hr	1.84	0.242	0.0121
1,2-Dibromo-3-chloropropane	96-12-8	year	0.000526	0.101	0.00505
1,2-Dibromoethane	106-93-4	year	0.0141	2.71	0.135
1,2-Dichloroethane	107-06-2	year	0.0385	7.39	0.369
1,2-Dichloropropane	78-87-5	year	0.1	19.2	0.959
1,2-Dimethylhydrazine	540-73-8	year	6.25E-06	0.0012	6.00E-05
1,2-Diphenylhydrazine	122-66-7	year	0.004	0.768	0.0384
1,2-Epoxybutane	106-88-7	24-hr	20	2.63	0.131
1,3-Butadiene	106-99-0	year	0.00588	1.13	0.0564
1,3-Dichloropropene	542-75-6	year	0.0625	12	0.6
1,3-Propane Sultone	1120-71-4	year	0.00145	0.278	0.0139
1,4-Dichlorobenzene	106-46-7	year	0.0909	17.4	0.872
1,4-Dioxane	123-91-1	year	0.13	24.9	1.25
1,6-Dinitropyrene	42397-64-8	year	9.09E-05	0.0174	0.000872
1,6-Hexamethylene diisocyanate	822-06-0	24-hr	0.07	0.00920	0.000460
1,8-Dinitropyrene	42397-65-9	year	0.000909	0.174	0.00872
1-[(5-Nitrofurfurylidene)-amino]-2-imidazolidinone	555-84-0	year	0.00196	0.376	0.0188
1-Amino-2-methylanthraquinone	82-28-0	year	0.0233	4.47	0.224
1-Chloro-1,1-difluoroethane	75-68-3	24-hr	5.00E+04	6570	329
1-Nitropyrene	5522-43-0	year	0.00909	1.74	0.0872
2,3,3',4,4',5'-Hexachlorobiphenyl	69782-90-7	year	5.26E-05	0.0101	0.000505
2,3,3',4,4',5-Hexachlorobiphenyl	38380-08-4	year	5.26E-05	0.0101	0.000505
2,3,3',4,4'-Pentachlorobiphenyl	32598-14-4	year	0.000263	0.0505	0.00252
2,3,3',4,4',5,5'-Heptachlorobiphenyl	39635-31-9	year	0.000263	0.0505	0.00252
2',3,4,4',5-Pentachlorobiphenyl	65510-44-3	year	0.000263	0.0505	0.00252
2,3',4,4',5-Pentachlorobiphenyl	31508-00-6	year	0.000263	0.0505	0.00252
2,3,4,4',5-Pentachlorobiphenyl	74472-37-0	year	5.26E-05	0.0101	0.000505
2,3,4,6,7,8-Hexachlorodibenzofuran	60851-34-5	year	2.63E-07	5.05E-05	2.52E-06
2,3,4,7,8-Pentachlorodibenzofuran	57117-31-4	year	5.26E-08	1.01E-05	5.05E-07
2,3,7,8-Tetrachlorodibenzo-p-dioxin & Related Compounds, NOS	---	year	2.63E-08	5.05E-06	2.52E-07
2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	year	2.63E-07	5.05E-05	2.52E-06
2,3,7,8-Tetrachlorodibenzo-p-dioxin	1746-01-6	year	2.63E-08	5.05E-06	2.52E-07
2,3',4,4',5,5'-Hexachlorobiphenyl	52663-72-6	year	0.000263	0.0505	0.00252

Common Name	CAS #	Averaging Period	ASIL ($\mu\text{g}/\text{m}^3$)	SQER (lb/averaging period)	De Minimis (lb/averaging period)
2,4,6-Trichlorophenol	88-06-2	year	0.05	9.59	0.48
2,4-Diaminoanisole	615-05-4	year	0.152	29.2	1.46
2,4-Diaminoanisole Sulfate	39156-41-7	year	0.27	51.8	2.59
2,4-Diaminotoluene	95-80-7	year	0.000909	0.174	0.00872
2,4-Dinitrotoluene	121-14-2	year	0.0112	2.15	0.107
2-Acetylaminofluorene	53-96-3	year	0.000769	0.148	0.00738
2-Amino-3-methyl-9H pyrido[2,3-b]indole	68006-83-7	year	0.00294	0.564	0.0282
2-Amino-3-methylimidazo-[4,5-f]quinoline	76180-96-6	year	0.0025	0.48	0.024
2-Amino-5-(5-Nitro-2-Furyl)-1,3,4-Thiadiazol	712-68-5	year	0.000217	0.0416	0.00208
2-Aminoanthraquinone	117-79-3	year	0.106	20.3	1.02
2-Chloroacetophenone	532-27-4	24-hr	0.03	0.00394	0.000197
2-Ethoxyethanol	110-80-5	24-hr	70	9.20	0.460
2-Methoxyethanol	109-86-4	24-hr	60	7.89	0.394
2-Methyl-1-nitroanthraquinone	129-15-7	year	0.000833	0.16	0.00799
2-Methylphenol	95-48-7	24-hr	600	78.9	3.94
2-Naphthylamine	91-59-8	year	0.00196	0.376	0.0188
2-Nitrofluorene	607-57-8	year	0.0909	17.4	0.872
2-Nitropropane	79-46-9	24-hr	20	2.63	0.131
3,3',4,4',5,5'-Hexachlorobiphenyl	32774-16-6	year	0.000263	0.0505	0.00252
3,3',4,4',5-Pentachlorobiphenyl	57465-28-8	year	2.63E-07	5.05E-05	2.52E-06
3,3',4,4'-Tetrachlorobiphenyl	32598-13-3	year	0.000263	0.0505	0.00252
3,3'-Dichlorobenzidine	91-94-1	year	0.00294	0.564	0.0282
3,4,4',5-Tetrachlorobiphenyl	70362-50-4	year	0.000263	0.0505	0.00252
3-Amino-9-ethylcarbazole hydrochloride	6109-97-3	year	0.0455	8.73	0.437
3-Chloro-2-methyl-propene	563-47-3	year	0.025	4.8	0.24
3-Methylcholanthrene	56-49-5	year	0.000159	0.0305	0.00153
3-Methylphenol	108-39-4	24-hr	600	78.9	3.94
4,4'-Diaminodiphenyl Ether	101-80-4	year	0.025	4.8	0.24
4,4-Methylene bis(2-chloroaniline)	101-14-4	year	0.00233	0.447	0.0224
4,4-Methylene bis(2-Methylaniline)	838-88-0	year	0.00385	0.739	0.0369
4,4'-Methylene bis(n,n'-dimethyl)aniline	101-61-1	year	0.0769	14.8	0.738
4,4'-Methylenedianiline	101-77-9	year	0.00217	0.416	0.0208
4,4-Methylenedianiline Dihydrochloride	13552-44-8	year	0.00294	0.564	0.0282
4,4-Thiodianiline	139-65-1	year	0.000233	0.0447	0.00224
4-Aminobiphenyl	92-67-1	year	0.000167	0.032	0.0016
4-Chloro-o-phenylenediamine	95-83-0	year	0.217	41.6	2.08
4-Dimethylaminoazobenzene	60-11-7	year	7.69E+04	1.48E+07	7.38E+05
4-Methylphenol	106-44-5	24-hr	600	78.9	3.94
4-Nitropyrene	57835-92-4	year	0.00909	1.74	0.0872
5-Methylchrysene	3697-24-3	year	0.000909	0.174	0.00872
5-Nitroacenaphthene	602-87-9	year	0.027	5.18	0.259
5-Nitro-o-Anisidine	99-59-2	year	0.0714	13.7	0.685
6-Nitrochrysene	7496-02-8	year	9.09E-05	0.0174	0.000872
7,12-Dimethylbenz[a]anthracene	57-97-6	year	1.41E-05	0.00271	0.000135
7h-Dibenzo[c,g]carbazole	194-59-2	year	0.000909	0.174	0.00872
A-alpha-c(2-amino-9h-pyrido[2,3-b]indole)	26148-68-5	year	0.00877	1.68	0.0841
Acetaldehyde	75-07-0	year	0.37	71	3.55
Acetamide	60-35-5	year	0.05	9.59	0.48

Common Name	CAS #	Averaging Period	ASIL ($\mu\text{g}/\text{m}^3$)	SQER (lb/averaging period)	De Minimis (lb/averaging period)
Acetonitrile	75-05-8	year	60	1.15E+04	576
Acrolein	107-02-8	24-hr	0.06	0.00789	0.000394
Acrylamide	79-06-1	year	0.000769	0.148	0.00738
Acrylic Acid	79-10-7	24-hr	1	0.131	0.00657
Acrylonitrile	107-13-1	year	0.00345	0.662	0.0331
Actinomycin D	50-76-0	year	4.00E-07	7.68E-05	3.84E-06
Alar	1596-84-5	year	0.196	37.6	1.88
Aldrin	309-00-2	year	0.000204	0.0391	0.00196
Allyl Chloride	107-05-1	year	0.167	32	1.6
alpha-Hexachlorocyclohexane	319-84-6	year	0.0013	0.249	0.0125
Amitrole	61-82-5	year	0.0037	0.71	0.0355
Ammonia	7664-41-7	24-hr	70.8	9.31	0.465
Ammonium bisulfate	7803-63-6	1-hr	120	0.263	0.0131
Ammonium sulfate	7783-20-2	1-hr	120	0.263	0.0131
Aniline	62-53-3	year	0.625	120	6
Antimony Trioxide	1309-64-4	24-hr	0.2	0.0263	0.00131
Aramite	140-57-8	year	0.116	22.3	1.11
Arsenic & Inorganic Arsenic Compounds	---	year	0.000303	0.0581	0.00291
Arsine	7784-42-1	24-hr	0.05	0.00657	0.000329
Asbestos	1332-21-4	year	1.59E-05	0.00305	0.000153
Auramine	492-80-8	year	0.004	0.768	0.0384
Azaserine	115-02-6	year	0.000323	0.062	0.0031
Azathioprine	446-86-6	year	0.00196	0.376	0.0188
Azobenzene	103-33-3	year	0.0323	6.2	0.31
Barium Chromate	10294-40-3	year	1.49E-05	0.00286	0.000143
Benz[a]anthracene	56-55-3	year	0.00909	1.74	0.0872
Benzene	71-43-2	year	0.0345	6.62	0.331
Benzidine	92-87-5	year	7.14E-06	0.00137	6.85E-05
Benzo[a]pyrene	50-32-8	year	0.000909	0.174	0.00872
Benzo[b]fluoranthene	205-99-2	year	0.00909	1.74	0.0872
Benzo[j]fluoranthene	205-82-3	year	0.00909	1.74	0.0872
Benzo[k]fluoranthene	207-08-9	year	0.00909	1.74	0.0872
Benzyl Chloride	100-44-7	year	0.0204	3.91	0.196
Benzyl Violet 4B	1694-09-3	year	0.175	33.6	1.68
Beryllium & Compounds (NOS)	---	year	0.000417	0.08	0.004
Beryllium Oxide	1304-56-9	year	0.000417	0.08	0.004
Beryllium Sulfate	13510-49-1	year	1.16E-06	0.000223	1.11E-05
beta-Butyrolactone	3068-88-0	year	0.00345	0.662	0.0331
Beta-hexachlorocyclohexane	319-85-7	year	0.00233	0.447	0.0224
beta-Propiolactone	57-57-8	year	0.00025	0.048	0.0024
Bis(chloroethyl)ether	111-44-4	year	0.00141	0.271	0.0135
Bis(chloromethyl)ether	542-88-1	year	7.69E-05	0.0148	0.000738
Bromodichloromethane	75-27-4	year	0.027	5.18	0.259
Bromoform	75-25-2	year	0.909	174	8.72
Butylated hydroxyanisole	25013-16-5	year	17.5	3360	168
C.I. Basic Red 9 Monohydrochloride	569-61-9	year	0.0141	2.71	0.135
Cadmium & Compounds	7440-43-9	year	0.000238	0.0457	0.00228
Captafol	2425-06-1	year	0.0233	4.47	0.224
Captan	133-06-2	year	1.52	292	14.6

Common Name	CAS #	Averaging Period	ASIL ($\mu\text{g}/\text{m}^3$)	SQER (lb/averaging period)	De Minimis (lb/averaging period)
Carbon disulfide	75-15-0	24-hr	800	105	5.26
Carbon monoxide	630-08-0	1-hr	23000	50.4	1.14
Carbon Tetrachloride	56-23-5	year	0.0238	4.57	0.228
Chlorambucil	305-03-3	year	7.69E-06	0.00148	7.38E-05
Chlordane	57-74-9	year	0.00294	0.564	0.0282
Chlordecone	143-50-0	year	0.000217	0.0416	0.00208
Chlorendic Acid	115-28-6	year	0.0385	7.39	0.369
Chlorinated Paraffins	108171-26-2	year	0.04	7.68	0.384
Chlorine	7782-50-5	24-hr	0.2	0.026	0.00131
Chlorine dioxide	10049-04-4	24-hr	0.2	0.026	0.00131
Chlorobenzene	108-90-7	24-hr	1000	131	6.57
Chlorobenzilate	510-15-6	year	0.0323	6.2	0.31
Chlorodifluoromethane	75-45-6	24-hr	5.00E+04	6570	328
Chloroform	67-66-3	year	0.0435	8.35	0.417
Chloromethyl methyl ether	107-30-2	year	0.00145	0.278	0.0139
Chloropicrin	76-06-2	24-hr	0.4	0.053	0.00263
Chloroethalonil	1897-45-6	year	1.12	215	10.7
Chlorozotocin	54749-90-5	year	1.45E-05	0.00278	0.000139
Chromic Acid	11115-74-5	year	1.51E-05	0.0029	0.000145
Chromic Trioxide	1333-82-0	year	1.28E-05	0.00246	0.000123
Chromic(VI) Acid	7738-94-5	year	1.51E-05	0.0029	0.000145
Chromium Hexavalent: Soluble, except Chromic Trioxide	---	year	6.67E-06	0.00128	6.40E-05
Chromium(VI)	18540-29-9	year	6.67E-06	0.00128	6.40E-05
Chrysene	218-01-9	year	0.0909	17.4	0.872
Cinnamyl Anthranilate	87-29-6	year	0.769	148	7.38
Cobalt	7440-48-4	24-hr	0.1	0.013	0.000657
Coke Oven Emissions	8007-45-2	year	0.00162	0.311	0.0155
Copper & Compounds	---	1-hr	100	0.219	0.011
Cumene	98-82-8	24-hr	400	52.6	2.63
Cupferron	135-20-6	year	0.0159	3.05	0.153
Cyclohexane	110-82-7	24-hr	6000	789	39.4
Cyclophosphamide (anhydrous)	50-18-0	year	0.00588	1.13	0.0564
Cyclophosphamide (Hydrated)	6055-19-2	year	0.00625	1.2	0.06
D & C Red No. 9	5160-02-1	year	0.667	128	6.4
Dacarbazine	4342-03-4	year	7.14E-05	0.0137	0.000685
Dantron	117-10-2	year	0.0455	8.73	0.437
DDD	72-54-8	year	0.0145	2.78	0.139
DDE	72-55-9	year	0.0103	1.98	0.0988
DDT	50-29-3	year	0.0103	1.98	0.0988
Di(2-ethylhexyl)phthalate	117-81-7	year	0.0417	8	0.4
Diazinon	333-41-5	24-hr	9	1.18	0.0591
Dibenz[a,h]acridine	226-36-8	year	0.00909	1.74	0.0872
Dibenz[a,h]anthracene	53-70-3	year	0.000833	0.16	0.00799
Dibenz[a,j]acridine	224-42-0	year	0.00909	1.74	0.0872
Dibenzo[a,e]pyrene	192-65-4	year	0.000909	0.174	0.00872
Dibenzo[a,h]pyrene	189-64-0	year	9.09E-05	0.0174	0.000872
Dibenzo[a,i]pyrene	189-55-9	year	9.09E-05	0.0174	0.000872
Dibenzo[a,l]pyrene	191-30-0	year	9.09E-05	0.0174	0.000872

Common Name	CAS #	Averaging Period	ASIL ($\mu\text{g}/\text{m}^3$)	SQER (lb/averaging period)	De Minimis (lb/averaging period)
Dibromochloromethane	124-48-1	year	0.037	7.1	0.355
Dichloromethane	75-09-2	year	1	192	9.59
Dichlorvos	62-73-7	year	0.012	2.3	0.115
Dieldrin	60-57-1	year	0.000217	0.0416	0.00208
Diesel Engine Exhaust, Particulate	---	year	0.00333	0.639	0.032
Diethanolamine	111-42-2	24-hr	3	0.394	0.0197
Diethyl mercury	627-44-1	24-hr	1.00E-99	1.00E-99	1.00E-99
Diethylstilbestrol	56-53-1	year	1.00E-05	0.00192	9.59E-05
Diglycidyl Resorcinol Ether	101-90-6	year	0.00204	0.391	0.0196
Dihydrosafrole	94-58-6	year	0.0769	14.8	0.738
Dimethyl Mercury	593-74-8	24-hr	1.00E-99	1.00E-99	1.00E-99
Dimethylcarbamoyl Chloride	79-44-7	year	0.00027	0.0518	0.00259
Dimethylvinylchloride	513-37-1	year	7.69	1480	73.8
Direct Black 38	1937-37-7	year	4.76E+04	9.13E+06	4.57E+05
Direct Blue 6	2602-46-2	year	0.000476	0.0913	0.00457
Direct Brown 95	16071-86-6	year	0.000526	0.101	0.00505
Disperse Blue 1	2475-45-8	year	0.769	148	7.38
Disulfoton	298-04-4	24-hr	6	0.789	0.0394
Epichlorohydrin	106-89-8	year	0.0435	8.35	0.417
Estradiol 17b	50-28-2	year	9.09E-05	0.0174	0.000872
Ethyl Carbamate	51-79-6	year	0.00345	0.662	0.0331
Ethyl Chloride	75-00-3	24-hr	3.00E+04	3940	197
Ethylbenzene	100-41-4	year	0.4	76.8	3.84
Ethylene Glycol	107-21-1	24-hr	400	52.6	2.63
Ethylene glycol monobutyl ether	111-76-2	24-hr	1.30E+04	1710	85.4
Ethylene glycol monoethyl ether acetate	111-15-9	24-hr	300	39.4	1.97
Ethylene glycol monomethyl ether acetate	110-49-6	24-hr	90	11.8	0.590
Ethylene oxide	75-21-8	year	0.0114	2.19	0.109
Ethylene Thiourea	96-45-7	year	0.0769	14.8	0.738
Ethyleneimine	151-56-4	year	5.26E-05	0.0101	0.000505
Ferric Sulfate	10028-22-5	1-hr	120	0.263	0.0131
Fluoride containing chemicals, NOS	---	24-hr	13	1.71	0.0854
Fluorine gas F ₂	7782-41-4	24-hr	15.8	2.08	0.104
Formaldehyde	50-00-0	year	0.167	32	1.6
Furmecyclox	60568-05-0	year	0.116	22.3	1.11
Furylfuramide	3688-53-7	year	0.0145	2.78	0.139
gamma-Hexachlorocyclohexane	58-89-9	year	0.00323	0.62	0.031
Glu-P-1	67730-11-4	year	0.000714	0.137	0.00685
Glu-P-2	67730-10-3	year	0.0025	0.48	0.024
Glutaraldehyde	111-30-8	24-hr	0.08	0.0105	0.000526
Gyromitrin	16568-02-8	year	0.000345	0.0662	0.00331
HC Blue 1	2784-94-3	year	0.0667	12.8	0.64
Heptachlor	76-44-8	year	7.69E-05	0.0148	0.000738
Heptachlor epoxide	1024-57-3	year	0.000385	0.0739	0.00369
Heptachlorodibenzo-p-dioxins, NOS	37871-00-4	year	2.63E-06	0.000505	2.52E-05
Hexachlorobenzene	118-74-1	year	0.00196	0.376	0.0188
Hexachlorobutadiene	87-68-3	year	0.0455	8.73	0.437
Hexachlorocyclohexane	608-73-1	year	0.000909	0.174	0.00872
Hexachlorocyclopentadiene	77-47-4	24-hr	0.2	0.026	0.00131

Common Name	CAS #	Averaging Period	ASIL ($\mu\text{g}/\text{m}^3$)	SQER (lb/averaging period)	De Minimis (lb/averaging period)
Hexachlorodibenzo-p-Dioxins, NOS	34465-46-8	year	2.63E-07	5.05E-05	2.52E-06
Hexachloroethane	67-72-1	year	0.0909	17.4	0.872
Hydrazine	302-01-2	year	0.000204	0.0391	0.00196
Hydrazine Sulfate	10034-93-2	year	0.00116	0.223	0.0111
Hydrogen chloride	7647-01-0	24-hr	9	1.18	0.0591
Hydrogen Cyanide	74-90-8	24-hr	9	1.18	0.0591
Hydrogen Fluoride	7664-39-3	24-hr	14	1.84	0.0920
Hydrogen Selenide	7783-07-5	1-hr	5	0.011	0.000548
Hydrogen Sulfide	7783-06-4	24-hr	2	0.263	0.0131
Indeno[1,2,3-cd]pyrene	193-39-5	year	0.00909	1.74	0.0872
Isophorone	78-59-1	24-hr	2000	2.63	13.1
Isopropyl Alcohol	67-63-0	1-hr	3200	7.01	0.35
Lasiocarpine	303-34-4	year	0.000455	0.0873	0.00437
Lead and compounds (NOS)		year	0.0833	16	10
Lead Acetate	301-04-2	year	0.0125	2.4	0.12
Lead Chromate	7758-97-6	year	4.14E-05	0.00794	0.000397
Lead Chromate Oxide	18454-12-1	year	7.01E-05	0.0135	0.000673
Lead Subacetate	1335-32-6	year	0.0909	17.4	0.872
Maleic Anhydride	108-31-6	24-hr	0.7	0.0920	0.00460
Manganese & Compounds	---	24-hr	0.04	0.00526	0.000263
Melphalan	148-82-3	year	2.70E-05	0.00518	0.000259
Melphalan HCl	3223-07-2	year	2.70E-05	0.00518	0.000259
Mercury, Elemental	7439-97-6	24-hr	0.09	0.0118	0.000591
Methyl Alcohol	67-56-1	24-hr	4000	526	26.3
Methyl Bromide	74-83-9	24-hr	5	0.657	0.0629
Methyl Chloride	74-87-3	24-hr	90	11.8	0.591
Methyl Ethyl Ketone	78-93-3	24-hr	5000	657	32.9
Methyl Isobutyl Ketone	108-10-1	24-hr	3000	394	19.7
Methyl Isocyanate	624-83-9	24-hr	1	0.131	0.00657
Methyl methacrylate	80-62-6	24-hr	700	92.0	4.60
Methyl Methanesulfonate	66-27-3	year	0.0357	6.85	0.343
Methyl Tertiary Butyl Ether	1634-04-4	year	3.85	739	36.9
Methylene diphenyl isocyanate	101-68-8	24-hr	0.7	0.0920	0.00460
Methylthiouracil	56-04-2	year	0.00909	1.74	0.0872
Michler's ketone	90-94-8	year	0.004	0.768	0.0384
Mirex	2385-85-5	year	0.000196	0.0376	0.00188
Mitomycin C	50-07-7	year	4.35E-07	8.35E-05	4.17E-06
Monocrotaline	315-22-0	year	0.000345	0.0662	0.00331
m-Xylene	108-38-3	24-hr	221	29.0	1.45
n,n-Dimethylformamide	68-12-2	24-hr	80	10.5	0.526
n-[4-(5-nitro-2-furyl)-2-thiazolyl]-acetamide	531-82-8	year	0.00233	0.447	0.0224
Naphthalene	91-20-3	year	0.0294	5.64	0.282
n-Hexane	110-54-3	24-hr	700	92.0	4.60
Nickel Refinery Dust	---	year	0.0042	0.806	0.0403
Nickel Subsulfide	12035-72-2	year	0.00204	0.391	0.0196
Nifurthiazole	3570-75-0	year	0.00152	0.292	0.0146
Nitric Acid	7697-37-2	1-hr	86	0.188	0.00942
Nitrotriacetic acid	139-13-9	year	0.667	128	6.4

Common Name	CAS #	Averaging Period	ASIL (µg/m³)	SQER (lb/averaging period)	De Minimis (lb/averaging period)
Nitritotriacetic acid, trisodium salt monohydrate	18662-53-8	year	0.345	66.2	3.31
Nitrofen	1836-75-5	year	0.0435	8.35	0.417
Nitrofurazone	59-87-0	year	0.0027	0.518	0.0259
Nitrogen dioxide	10102-44-0	1-hr	470	1.03	0.457
n-Methyl-n-nitro-n-nitrosoguanidine	70-25-7	year	0.000417	0.08	0.004
n-Nitrosodiethanolamine	1116-54-7	year	0.00125	0.24	0.012
n-Nitrosodiethylamine	55-18-5	year	1.00E-04	0.0192	0.000959
n-Nitrosodimethylamine	62-75-9	year	0.000217	0.0416	0.00208
n-Nitroso-di-n-butylamine	924-16-3	year	0.000323	0.062	0.0031
n-Nitrosodi-n-propylamine	621-64-7	year	0.0005	0.0959	0.0048
n-Nitrosodiphenylamine	86-30-6	year	0.385	73.9	3.69
n-Nitrosomorpholine	59-89-2	year	0.000526	0.101	0.00505
n-Nitroso-n-ethylurea	759-73-9	year	0.00013	0.0249	0.00125
n-Nitroso-n-methylethylamine	10595-95-6	year	0.000159	0.0305	0.00153
n-Nitroso-n-methylurea	684-93-5	year	2.94E-05	0.00564	0.000282
n-Nitroso-n-Methylurethane	615-53-2	year	3.23E-05	0.0062	0.00031
n-Nitrososornicotine	16543-55-8	year	0.0025	0.48	0.024
n-Nitrosopiperidine	100-75-4	year	0.00037	0.071	0.00355
n-Nitrosopyrrolidine	930-55-2	year	0.00167	0.32	0.016
o-Anisidine	90-04-0	year	0.025	4.8	0.24
o-Anisidine Hydrochloride	134-29-2	year	0.0323	6.2	0.31
o-Phenylphenate, Sodium	132-27-4	year	1.16	223	11.1
ortho-Aminoazotoluene	97-56-3	year	0.000909	0.174	0.00872
o-Toluidine	95-53-4	year	0.0196	3.76	0.188
o-Toluidine Hydrochloride	636-21-5	year	0.027	5.18	0.259
o-Xylene	95-47-6	24-hr	221	29.0	1.45
Ozone	10028-15-6	1-hr	180	0.394	0.0197
para-Cresidine	120-71-8	year	0.0233	4.47	0.224
p-Chloro-o-toluidine	95-69-2	year	0.013	2.49	0.125
Pentabromodiphenyl Ether	32534-81-9	24-hr	6	0.789	0.0394
Pentachlorophenol	87-86-5	year	0.217	41.6	2.08
Perchloroethylene	127-18-4	year	0.169	32.4	1.62
Phenacetin	62-44-2	year	1.59	305	15.3
Phenazopyridine	94-78-0	year	0.0204	3.91	0.196
Phenazopyridine hydrochloride	136-40-3	year	0.0233	4.47	0.224
Phenesterin	3546-10-9	year	2.33E-05	0.00447	0.000224
Phenobarbital	50-06-6	year	0.00769	1.48	0.0738
Phenol	108-95-2	24-hr	200	26.3	1.31
Phenoxybenzamine	59-96-1	year	0.00112	0.215	0.0107
Phenoxybenzamine hydrochloride	63-92-3	year	0.0013	0.249	0.0125
Phosgene	75-44-5	24-hr	0.3	0.0394	0.00197
Phosphine	7803-51-2	24-hr	0.8	0.105	0.00526
Phosphoric Acid	7664-38-2	24-hr	7	0.920	0.0460
Phosphorus	7723-14-0	24-hr	20	2.63	0.131
Phthalic Anhydride	85-44-9	24-hr	20	2.63	0.131
p-Nitrosodiphenylamine	156-10-5	year	0.159	30.5	1.53
Polybrominated Biphenyls	---	year	0.000116	0.0223	0.00111
Polychlorinated Biphenyls, NOS	1336-36-3	year	0.00175	0.336	0.0168

Common Name	CAS #	Averaging Period	ASIL ($\mu\text{g}/\text{m}^3$)	SQER (lb/averaging period)	De Minimis (lb/averaging period)
Ponceau 3R	3564-09-8	year	0.217	41.6	2.08
Ponceau MX	3761-53-3	year	0.769	148	7.38
Potassium Bromate	7758-01-2	year	0.00714	1.37	0.0685
Procarbazine	671-16-9	year	0.00025	0.048	0.0024
Procarbazine Hydrochloride	366-70-1	year	0.000294	0.0564	0.00282
Propylene	115-07-1	24-hr	3000	394	19.7
Propylene Glycol	57-55-6	24-hr	28.5	3.75	0.187
Propylene Glycol Dinitrate	6423-43-4	24-hr	0.276	0.0363	0.00181
Propylene glycol monomethyl ether	107-98-2	24-hr	7000	920	46.0
Propylene oxide	75-56-9	year	0.27	51.8	2.59
Propylthiouracil	51-52-5	year	0.00345	0.662	0.0331
p-Xylene	106-42-3	24-hr	221	29.0	1.45
Refractory Ceramic Fibers	---	24-hr	0.03 fibers/cm ³	0.00394	0.000197
Reserpine	50-55-5	year	0.000323	0.062	0.0031
Safrole	94-59-7	year	0.0159	3.05	0.153
Selenium & Selenium Compounds (other than Hydrogen Selenide)	---	24-hr	20	2.63	0.131
Short-chain (C10-13) chlorinated paraffins	85535-84-8	year	0.04	7.68	0.384
Silica (crystalline, Respirable)	7631-86-9	24-hr	3	0.394	0.0197
Sodium Hydroxide	1310-73-2	1-hr	8	0.0175	0.000876
Sodium Sulfate	7757-82-6	1-hr	120	0.263	0.0131
Sterigmatocystin	10048-13-2	year	1.00E-04	0.0192	0.000959
Streptozotocin	18883-66-4	year	3.23E-05	0.0062	0.00031
Styrene	100-42-5	24-hr	900	118	5.91
Styrene Oxide	96-09-3	year	0.0217	4.16	0.208
Sulfallate	95-06-7	year	0.0185	3.55	0.178
Sulfur dioxide	7446-09-05	1-hr	660	1.45	0.457
Sulfur Mustard	505-60-2	24-hr	0.7	0.0920	0.00460
Sulfuric Acid	7664-93-9	24-hr	1	0.131	0.00657
Tetrabromodiphenyl Ether	40088-47-9	24-hr	6	0.789	0.0394
Thioacetamide	62-55-5	year	0.000588	0.113	0.00564
Thiourea	62-56-6	year	0.0476	9.13	0.457
Titanium Tetrachloride	7550-45-0	24-hr	0.1	0.0131	0.00657
Toluene	108-88-3	24-hr	5000	657	32.9
Toluene-diisocyanates	26471-62-5	24-hr	0.07	0.00920	0.000460
Toluene-2,4-diisocyanate	584-84-9	24-hr	0.07	0.00920	0.000460
Toluene-2,6-diisocyanate	91-08-7	24-hr	0.07	0.00920	0.000460
Toxaphene	8001-35-2	year	0.00294	0.564	0.0282
Trans-1,2-dichloroethene	156-60-5	24-hr	807	106	5.30
Trans-2[(dimethylamino)-methylimino]-5-[2-(5-nitro-2-furyl)-vinyl]-1,3,4-oxadiazole	55738-54-0	year	0.00769	1.48	0.0738
Trichloroethylene	79-01-6	year	0.5	95.9	4.8
Triethylamine	121-44-8	24-hr	200	26.3	1.31
Tris-(1-Aziridinyl)phosphine sulfide	52-24-4	year	0.000294	0.0564	0.00282
Tris(2,3-dibromopropyl)phosphate	126-72-7	year	0.00152	0.292	0.0146
Tryptophan-P-1	62450-06-0	year	0.000135	0.0259	0.0013
Tryptophan-P-2	62450-07-1	year	0.0011	0.211	0.0106
Vanadium	7440-62-2	24-hr	0.2	0.0263	0.00131

Common Name	CAS #	Averaging Period	ASIL ($\mu\text{g}/\text{m}^3$)	SQER (lb/averaging period)	De Minimis (lb/averaging period)
Vanadium Pentoxide	1314-62-1	1-hr	30	0.0657	0.00329
Vinyl acetate	108-05-4	24-hr	200	26.3	1.31
Vinyl Bromide	593-60-2	24-hr	3	0.394	0.00197
Vinyl Chloride	75-01-4	year	0.0128	2.46	0.123

NOS - Not otherwise specified. This applies to situations where emission factors for a group of pollutants is reported, but specific isomers, congeners, or chemicals are not reported.

[Statutory Authority: Washington Clean Air Act, RCW 70.94.152. 09-11-131 (Order 05-19), § 173-460-150, filed 5/20/09, effective 6/20/09. Statutory Authority: Chapter 70.94 RCW. 94-03-072 (Order 93-19), § 173-460-150, filed 1/14/94, effective 2/14/94. Statutory Authority: RCW 70.94.331. 91-13-079 (Order 90-62), § 173-460-150, filed 6/18/91, effective 9/18/91.]

NOTES:

Reviser's Note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.